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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.
09/072,994	05/05/98	COTTAREL G	MIV-052.02

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EXAMINER	
PAK,M	
ART UNIT	**PAPER NUMBER**
1646	

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Please find below and/or attached an Office communication concerning this application or proceeding.

Commissioner of Patents and Trademarks

PTO-90C (Rev 2/95)

1- File Copy

Office Action Summary	Application No. 09/072,994	Applicant(s) Cottarel et al.
	Examiner Michael Pak	Group Art Unit 1646

☐ Responsive to communication(s) filed on _____.

☐ This action is **FINAL.**

☐ Since this application is in condition for allowance except for formal matters, **prosecution as to the merits is closed** in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11; 453 O.G. 213.

A shortened statutory period for response to this action is set to expire *1* month(s), or thirty days, whichever is longer, from the mailing date of this communication. Failure to respond within the period for response will cause the application to become abandoned. (35 U.S.C. § 133). Extensions of time may be obtained under the provisions of 37 CFR 1.136(a).

Disposition of Claims

☒ Claim(s) *1-36* is/are pending in the application.

Of the above, claim(s) _____ is/are withdrawn from consideration.

☐ Claim(s) _____ is/are allowed.

☐ Claim(s) _____ is/are rejected.

☐ Claim(s) _____ is/are objected to.

☒ Claims *1-36* are subject to restriction or election requirement.

Application Papers

☐ See the attached Notice of Draftsperson's Patent Drawing Review, PTO-948.

☐ The drawing(s) filed on _____ is/are objected to by the Examiner.

☐ The proposed drawing correction, filed on _____ is ☐approved ☐disapproved.

☐ The specification is objected to by the Examiner.

☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. § 119

☐ Acknowledgement is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d).

☐ All ☐ Some* ☐ None of the CERTIFIED copies of the priority documents have been

☐ received.

☐ received in Application No. (Series Code/Serial Number) _____.

☐ received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

*Certified copies not received: _____.

☐ Acknowledgement is made of a claim for domestic priority under 35 U.S.C. § 119(e).

Attachment(s)

☐ Notice of References Cited, PTO-892

☐ Information Disclosure Statement(s), PTO-1449, Paper No(s). _____

☐ Interview Summary, PTO-413

☐ Notice of Draftsperson's Patent Drawing Review, PTO-948

☐ Notice of Informal Patent Application, PTO-152

--- SEE OFFICE ACTION ON THE FOLLOWING PAGES ---

Election/Restriction

1. Restriction to one of the following inventions is required under 35 U.S.C. 121:

Group I. Claims 1-6 and 8-13 are, drawn to a Candida polypeptide, classified in Class 435, subclass 196; a fusion protein (435/195+); and an immunogen (424/184.1).

Group II. Claim 7 is, drawn to an antibody, classified in Class 530, subclass 387.1.

Group III. Claims 14-22 are, drawn to a nucleic acid, classified in Class 536, subclass 23.74; expression vector (435/320.1); a host cell (435/252.3 or 935/66); and a method of producing a recombinant protein (435/69.1).

Group IV. Claims 22-24 are, drawn to a probe/primer for identifying nucleic acid, Classified in Class 536, subclass 24.32 and 24.33.

Group V. Claim 25 is, drawn to a diagnostic test kit, Classified in Class 435, subclass 6.

Group VI. Claims 26-31 are drawn to a method of identifying a compound which is an inhibitor, Classified in Class 435, subclass 7.71.

Group VII. Claim 32 is drawn to an assay for screening test agents for an inhibitor of interaction, classified in Class 435, subclass 7.8.

Group VIII. Claim 33 is drawn to an assay for screening test agents for an inhibitor of interaction, classified in Class 435, subclass 7.72.

Group IX. Claims 34-35 are drawn to an assay for identifying an inhibitor, Classified in Class 435, subclass 7.31.

Group X. Claim 36 is drawn to a Schizosaccharomyces cell, classified in Class 435, subclass 254.21.

The inventions are distinct, each from the other because of the following reasons:

Group I is related to group II since group I can be used to generate the antibodies of group II. Group I is directed to products that are distinct both structurally and functionally from products of group II. Therefore, group I is not required for group II and patentably distinct from the other groups. The polypeptide of group I can be used independently of the antibodies of group II. The polypeptides may be used to analyze phosphatase activity whereas the antibodies can be used to characterize the protein on an SDS gel.

Group I is related to groups III-V because the DNAs of group III-V encode TYP1 protein. The protein of Group I is directed to products that are distinct both structurally and functionally from the polynucleotides of group III-V. Therefore, group I is not required for groups III-V and patentably distinct from the

other groups. The polypeptide of group I can be used independently of the nucleotides of group III. The polypeptides may be used to analyze phosphatase activity whereas the DNAs can be used in DNA hybridization.

Inventions of group I and groups VI-IX are related as product and process of use, respectively. The inventions can be shown to be distinct if either or both of the following can be shown: (1) the process for using the product as claimed can be practiced with another materially different product or (2) the product as claimed can be used in a materially different process of using that product (M.P.E.P. § 806.05(h)). In the instant case the TYP1 product of group I may be used for mapping the antigenic epitope to an antibody which is different from the inventions of groups VI-IX which are directed to methods of identifying compounds which interact with the TYP1 protein.

Group I is related to group X because the cells of group X expresses the TYP1 protein. The protein of Group I is directed to products that are distinct both structurally and functionally from the cells of group X. Therefore, group I is not required for group II and thus patentably distinct from the other groups. The polypeptide of group I can be used independently of the cells of group X. The polypeptides may be used to analyze phosphatase activity whereas the cells can be used in assays for cell cycle.

Group II is related to groups III-V since the products in

groups III-V can be used to generate TYP1 protein which further can be used to generate the antibodies of group II. Group II is directed to products that are distinct both structurally and functionally from products of groups III-V. Therefore, group II is not required for groups III-V and patentably distinct from the other groups. The antibodies of group II can be used independently of the polynucleotides of groups III-IV. The antibodies can be used to characterize the protein on an SDS gel whereas the nucleotides may be used in DNA hybridization.

Group II is not related to methods of groups VI nor VIII-IX because the experimental materials and products in groups VI and VIII-IX are independent of the antibodies of group II. Therefore, group II is not required for groups VI and VIII-IX and patentably distinct from the other groups. The antibodies of group II can be used independently of the methods of groups III-IV. The antibodies can be used to characterize the protein on a SDS gel whereas the methods identify products that are completely unrelated.

Inventions of group II and group VII are related as product and process of use, respectively. The inventions can be shown to be distinct if either or both of the following can be shown: (1) the process for using the product as claimed can be practiced with another materially different product or (2) the product as claimed can be used in a materially different process of using

that product (M.P.E.P. § 806.05(h)). In the instant case the antibodies of group II may be used for radioimmunoassay to quantify TYP1 protein which is different from the invention of group VII which is directed to methods of identifying compounds. The invention of group VII can be determined with a phosphatase assay.

Group II is not related to group X because the cells of group X do not require the antibodies of group II. The antibodies of Group II are directed to products that are distinct both structurally and functionally from the cells of group X. Therefore, group II is not required for group X and patentably distinct from the other group. The antibodies of group II can be used independently of the cells of group X. In the instant case the antibodies of group II may be used for radioimmunoassay to quantify TYP1 protein whereas the cells can be used in assays for cell cycle.

Group III is related to groups IV because the DNAs of group III and group IV share similar sequences. The DNA of Group III is directed to products that are distinct both structurally and functionally from the polynucleotides of group IV. Therefore, group III is not required for group IV and patentably distinct from the other group. The DNA of group III can be used independently of the nucleotides of group IV. The DNA of group III may be used for gene complementation assays in TYP1 minus

cells whereas the probes and primers of group IV can be used in DNA hybridization or polymerase chain reactions.

Inventions of group III and group V are related as product and process of use, respectively. The inventions can be shown to be distinct if either or both of the following can be shown: (1) the process for using the product as claimed can be practiced with another materially different product or (2) the product as claimed can be used in a materially different process of using that product (M.P.E.P. § 806.05(h)). In the instant case the nucleotides of group III may be used for gene complementation assays in TYP1 minus cells which is different from the invention of group V which may use hybridization or polymerase chain reaction to identifying nucleic acids encoding regulatory proteins.

Group III is not related to methods of groups VI-VII because the experimental materials and products in groups VI-VII are independent of the polynucleotides of group III. Therefore, group III is not required for groups VI-VII and patentably distinct from the other groups. The DNAs of group III can be used independently of the methods of groups VI-VII. The DNAs of group III can be used for hybridization whereas the methods can identify inhibitors of TYP1.

Inventions of group III and group VIII-X are related as product and process of use, respectively. The inventions can be

shown to be distinct if either or both of the following can be shown: (1) the process for using the product as claimed can be practiced with another materially different product or (2) the product as claimed can be used in a materially different process of using that product (M.P.E.P. § 806.05(h)). In the instant case the nucleotides of group III may be used for hybridization which is different from the inventions of groups VIII-X which use the nucleic acids to express the proteins.

Inventions of group IV and group V are related as product and process of use, respectively. The inventions can be shown to be distinct if either or both of the following can be shown: (1) the process for using the product as claimed can be practiced with another materially different product or (2) the product as claimed can be used in a materially different process of using that product (M.P.E.P. § 806.05(h)). In the instant case the nucleotides of group IV may be used for antisense inhibition which is different from the invention of group V which is directed to detecting the nucleic acids encoding the regulatory proteins.

Group IV is not related to methods of groups VI-IX because the experimental materials and products in groups VI-IX are independent of the probes and primers of group IV. Therefore, group IV is not required for groups VI-IX and patentably distinct from the other groups. The probes and primers of group IV can be

used independently of the methods of groups VI-IX. The DNAs of group III can be used for hybridization whereas the methods of groups VI-IX can be used to identify inhibitors of TYP1.

Group IV is not related to group X because the cells of group X do not require the polynucleotides of group IV. The probes and primers of Group IV are directed to products that are distinct both structurally and functionally from the cells of group X. Therefore, group IV is not required for group X and patentably distinct from the other group. The probes and primers of group IV can be used independently of the cells of group X. In the instant case the probes and primers of group IV may be used for hybridization whereas the cells can be used in assays for cell cycle.

Group V is not related to methods of groups VI-IX because the experimental materials and products in groups VI-IX are independent of the diagnostic kit of group V. Therefore, group V is not required for groups VI-IX and patentably distinct from the other groups. The diagnostic kit of group V can be used independently of the methods of groups VI-IX. The diagnostic kit of group V can be used for detecting nucleic acid encoding regulatory proteins whereas the methods can identify inhibitors of TYP1.

Group V is not related to group X because the cells of group X do not require the diagnostic kit of group V. The diagnostic

kit of Group V are directed to products that are distinct both structurally and functionally from the cells of group X. Therefore, group V is not required for group X and patentably distinct from the other group. The diagnostic kit of group V can be used independently of the cells of group X. In the instant case the diagnostic kits of group V may be used for detecting nucleic acid encoding regulatory proteins whereas the cells can be used in assays for cell cycle.

The method of group VI is related to the methods of groups VII-IX in that TYP1 polypeptide may be used for all the methods. The method of group VI is patentably distinct from the methods of groups VII-IX because they have different method steps and starting materials, and are not required one for the other. The method of group VI may be practiced using the phosphatase activity of TYP1 polypeptide whereas the inventions of groups VII-IX utilize different assays. The method of group VII may be practiced with antibodies directed to TYP1 polypeptide or cyclin dependent kinase. The method of group VIII may be practiced with the interaction trap system. The method of group IX detects changes in cell cycle.

Inventions of group X and groups VII-IX are related as product and process of use, respectively. The inventions can be shown to be distinct if either or both of the following can be shown: (1) the process for using the product as claimed can be

practiced with another materially different product or (2) the product as claimed can be used in a materially different process of using that product (M.P.E.P. § 806.05(h)). In the instant case the cells of group X may be used for protein isolation which is different from the inventions of groups VI-IX which are directed to methods of detecting inhibitors.

The method of group VII is related to the methods of groups VIII-IX in that TYP1 polypeptide may be used for all the methods. The method of group VII is patentably distinct from the methods of groups VIII-IX because they have different method steps and starting materials, and are not required one for the other. The method of group VII may be practiced with antibodies directed to TYP1 polypeptide or cyclin dependent kinase whereas the inventions of groups VIII-IX utilize different assays. The method of group VIII may be practiced with the interaction trap system. The method of group IX detects changes in cell cycle.

The method of group VIII is related to the method of group IX in that TYP1 polypeptide may be used for both methods. The method of group VIII is patentably distinct from the method of group IX because they have different method steps and starting materials, and are not required one for the other. The method of group VIII may be practiced with the interaction trap system whereas the inventions of group IX detects changes in cell cycle.

For the reasons given immediately above regarding groups I-

X, and because of their separate classification, a search and examination of one group is not the same as that for any other group. Therefore, an undue burden would be placed on the examiner to search and examine more than one group of invention.

Because these inventions are distinct for the reasons given above and have acquired a separate status in the art as shown by their different classification, restriction for examination purposes as indicated is proper.

A telephone call was made to Attorney Matthew Vincent on 16 June 1999 to request an oral election to the above restriction requirement, but did not result in an election.

Applicant is advised that the reply to this requirement to be complete must include an election of the invention to be examined even though the requirement be traversed (37 CFR 1.143).

Applicant is reminded that upon the cancellation of claims to a non-elected invention, the inventorship must be amended in compliance with 37 C.F.R. § 1.48(b) if one or more of the currently named inventors is no longer an inventor of at least one claim remaining in the application. Any amendment of inventorship must be accompanied by a filed petition under 37 C.F.R. § 1.48(b) and by the fee required under 37 C.F.R. § 1.17(h).

Please Note: In an effort to enhance communication with

our customers and reduce processing time, Group 1640 is running a Fax Response Pilot for Written Restriction Requirements. A dedicated Fax machine is in place to receive your responses. The Fax number is 703-305-3704. A Fax cover sheet is attached to this Office Action for your convenience. We encourage your participation in this Pilot program. If you have any questions or suggestions please contact Paula Hutzell, Ph.D., Supervisory Patent Examiner at Paula.Hutzell@uspto.gov or 703-308-4310. Thank you in advance for allowing us to enhance our customer service. Please limit the use of this dedicated Fax number to responses to Written Restrictions.

2. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Michael Pak, whose telephone number is (703) 305-7038. The examiner can normally be reached on Monday through Friday from 9:30 AM to 6:00 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Paula Hutzell, can be reached on (703) 308-4310.

Official papers filed by fax should be directed to (703) 308-4242. Faxed draft or informal communications with the examiner should be directed to (703) 308-0294.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the Group receptionist whose telephone number is (703) 308-0196.

Michael D. Pak
Patent Examiner
Art Unit 1646
16 June 1999